Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

(about 6 fish) could be profitably retailed by costermongers for one penny, or 2 pounds of sprats for one halfpenny."

A sharp arraignment of the "Billingsgate Ring," which Dr. Hamilton accuses of diminishing the market supply of fish, in order to keep up the price, by getting the fish destroyed at various places along the coast, and a brief description of the "koshering" process for preserving animal food, closes this interesting paper.

The idea embodied in the article is, that foul fish is one of the most unwholesome, disease-producing factors in existence, but the conditions that result in such food being put upon the market are not necessary, but are due to ignorance, carelessness and greed, and can be remedied at no great expense. (Bull. U. S. Fish Commission, Vol. XIII, pp. 311–334).

ENTOMOLOGY.[1]

The Genera of Lysiopetalidæ.—The genus Spirostrephon was founded by Brandt on *Iulus lactarius* Say, in 1840. Owing to the fact that many subsequent naturalists have not had an equally vivid appreciation of generic characters and limits, Spirostrephon has usually appeared as a synonym of Lysiopetalum, the typical species of which is *L. fœtidissimum* (Savi).

Through the kindness of Mr. Pocock of the British Museum I have had the opportunity of comparing specimens of *fœtidissimum* with abundant material of *lactarium* from Pennsylvania, Ohio, and the District of Columbia. The form, and ornamentation of the body and the location of the repugnatorial pores render the generic distinctness evident, as Brandt pointed out. Brandt also remarks[2] the similarity with Cambala, but holds the genera distinct because the ocelli of Cambala are represented as arranged in a single row. There seems to be no ground for Latzel's inference that Brandt included Cambala under Spirostrephon.[3] Brandt saw but one specimen, which must have been young, as the length and number of segments are less than in mature specimens of *lactarium.*

---

[1] Edited by Clarence M. Weed, New Hampshire College, Durham, N. H.

[2] Recueil, p. 90.

[3] Myr. Ost. Ung. Mon., II, p. 353.

The Lysiopetalidæ seem to be in need of careful generic revision. The result would probably be the recognition of several new genera from Europe and Western Asia. Recently Dr. C. Verhœff has attempted to arrange some of the European species[4], and with his usual disregard for the association of generic names with their typical species has placed *Lysiopetalum fœtidissimum* under a subgenus Silvestria, while other species unknown to Brandt form the basis of the subgenus Lysiopetalum, *sensu strictu*. The conjecture is offered by Dr. Verhœff that *Lysiopetalum carinatum* Brandt belongs in the latter subgenus, and if this is really the case there is no need of a new generic or subgeneric name. According to Berlese[5] *Callipus rissonius* Leach (1826) is a synonym of *Lysiopetalum carinatum* Brandt, but the earlier designation having priority, Dr. Verhœff's second subgenus seems to be entitled to a name seventy years old.

The late Mr. C. H. Bollman conjectured from the description of Callipus that it is the same as Lysiopetalum, and proceeded to form the names of the family and superfamily accordingly. Mr. Pocock has adopted this suggestion. However, it seems clear that we must identify a type species for Callipus, or it is a *nomen nudum*, and may be neglected; also, if we are to use the name Callipus we must accept Berlese's identification until reasons to the contrary are shown, and the meagre description of Callipus will make these hard to find. I have examined a specimen purporting to be *Lysiopetalum carinatum* Brandt and agreeing with the original description, as far as that goes. The differences between it and the specimens of *fœtidissimum* are very considerable and render it probable that the two genera may be maintained on sufficient characters when a careful study of the European forms has been made. In the meantime we may accept the three genera as distinct, and continue the use of the older name Lysiopetalidæ, which would need to be resumed in case it were at any time proven that *fœtissimum* represents a generic type distinct from *rissonius*, whatever that may be.

The genus Eurygyrus C. L. Koch may also prove to be distinct, and the enormous species *Platops xanthina* Newport evidently represents an independent generic type, if the analogy of other Diplopoda does not fail in the Lysiopetalidæ. The genus *Platops* Newport was founded, according to Pocock, on *Lysioptalum lactarium* Say, and so becomes a synonym of Spirostrephon. Two other genera, *Cylindrosoma* Gray and *Reasia* Gray, have been referred to the Lysiopetalidæ. As no species have been published under them and practically no descriptions are given, they may be looked upon as *nomina nuda,* and not included in the synonymy of any of the genera. The following, then, are the genera of Lysiopetalidæ which have not been properly disposed of, and may for the present be assumed to be valid:

---

[4] Zool. Anzeiger, XVIII, p. 207.

[5] Studi Critici dei Chilognati, etc., Part I, Julidæ, p. 31.

Genus Callipus Leach (1826); type *rissonius* Leach; locality, Nice.
Syn. (Subg.) *Lysiopetalum* Verhœff; type *illyricum* Latzel.

Genus Lysiopetalum Brandt (1840); type *fœtidissimum* (Savi); locality, Italy.
Syn. (Subg.) *Sylvestria* Verhœff (1895); type *fœtidissimum* (Savi).

Genus Spirostrephon Brandt (1840); type *lactarium* (Say); locality, North America.
Syn. *Platops* Newport (1844); type *rugulosa* (Gray)=*lactarium* (Say).

Genus Eurygyrus C. L. Koch (1847); type *rufolinatus* C. L. Koch; locality, Constantinople.

Genus Megastrephon nov.; type *xanthinum* (Newport); locality, Asia Minor.—O. F. Cook.

Habits of Ants.—In an interesting paper on the ants of India[6] Mr. G. A. J. Rothney reports that the nest of a colony of *Myrmicaria fodiens* Jerdon, under a banyan tree in the park at Barrackpore which had been constantly under the author's notice between 1872 and 1886 was still flourishing in January, 1894, showing a continuous residence in one spot of twenty-two years. In Madras he found *Monomorium salomonis* Lin. used in protecting bales of paper from white ants. The paper merchant scattered sugar around the sides of the bales every day to ensure the attendance of these red ants.

Concerning *Pheidole rhombinoda* Mayr. Mr. Rothney says: "I found some nests in Barrackpore Park, covered over in a perfect circle (taking the centre from the entrance, the circumference would equal about 10 to 12 inches), with the leaflets of some species of mimosa, but no leaflets were found in the nest itself on digging it up, and the even and umbrella-like appearance of the arrangements seems to suggest a protection against heat or rain, as the objects the ants have in view.

"In Madura, I came across a number of nests of a very curious and, to me, novel form.

"The entrances were surrounded by little mounds arranged in a circle, composed of the dead bodies, or parts of bodies, of *Camponotus com-*

---

[6] Trans. Ent. Soc. London, 1895, Part II, pp. 195–211.

pressus and *C. rufoglaucus,* but chiefly the big soldiers of compressus. There were heads alone, heads with the thorax attached, thorax without the head, bodies without thorax, with a scattering of legs and antennæ, attached and unattached, in every possible form, but I could not find any of these portions in the nests. Now the question arises, What are these mounds for, and how does Pheidole collect and form them? Are they simply carcases stacked, to be cut up at leisure and carried into the nest in suitable sizes for future provision, or are these bodies arranged as a grim warning to prowling enemies, after the fashion of skulls set up at the entrance to the villages of some wild and primitive tribe? and, then, how does Pheidole collect them? It is hardly possible that they are killed and brought in, for Pheidole would have to be in overwhelming force to master a single giant-headed soldier of compressus. Perhaps they act as undertakers, and collect the dead thrown out by Camponotus for some special purpose of their own; and, then, why should this trait break out in Madura, for certainly I have not met with it in other parts, although compressus and rhombinoda are practically common everywhere."

Mr. Rothney was unsuccessful in getting ants to stridulate while on the march. He thinks they do so, however and concludes that "in laying down rules for ant conduct some allowance should always be made for the different little traits of character, the whims and fancies, as it were, which are to be found not only in a given species but in individual ants."

Entomological Notes.—Mr. R. I. Pocock figures and describes[7] an interesting stridulating organ in the male of the spider *Cambridgea antopodiana* (White). He believes it is used as a sexual call, no such organ being found in the female.

Professors J. H. Comstock and V. L. Kellogg have prepared an extremely valuable laboratory handbook entitled The Elements of Insect Anatomy. It is published by the Comstock Publishing Co., Ithaca, N. Y.

Bulletin 48 of the U. S. National Museum consists of a Revision of the Deltoid Moths by Prof. J. B. Smith. There are 126 pages of letterpress and fourteen plates of figures.

"A Preliminary List of the Hemiptera of Colorado" is the title of Bulletin 31 of the Colorado Agricultural Experiment Station. In it Messrs. Gillette and Baker have prepared a faunistic paper of unusual value. There are 647 species listed, belonging to 261 genera; five new genera and 111 new species are described.

[7] Annals & Mag. Nat. Hist., XVI, 230.

In Bulletin 33 of the U. S. Division of Entomology, Mr. L. O. Howard presents a valuable compilation concerning American Legislation Against Injurious Insects.

EMBRYOLOGY.[1]

Conjugation of the Brandling.—Of the many kinds of earthworms common in the Eastern United States one of the best known is the prettily colored but offensive-smelling species often called the striped worm from its conspicuous cross bands of red-brown and yellow, but known to the specialist at present as *Allolobophora fœtida.* It abounds in decaying vegetable matter especially in compost and manure heaps where it lies a few inches beneath the surface and may be readily captured though quick and active in its movements. In some regions it is regarded by the youthful angler as especially attractive bait for trout and as bait it has been used ever since the days of Isaac Walton who refers to it repeatedly in the Complete Angler by a name too characteristic to be lost from our vocabulary—the brandling. Thus in speaking of bait for the perch he says—" and of worms the dunghill worm called the brandling I take to be the best, being well scoured in moss or fennel."

It is well known that earthworms, though they are hermaphrodites yet interchange sexual products in a remarkable process of conjugation. Our knowledge of this process, is however, confined to the accounts of two naturalists who studied the large European earthworm *Lumbricus terrestris.* W. Hoffmeister, whose work on earthworms published in Brunswick in 1845 was the pioneer in a field that was later so diligently tilled by French and of late by English specialists, observed the worms as they came out on the surface of the ground in the night-time and obtained a pretty good idea of the main phenomena of conjugation.

His account is in the main as follows: " The old worms leave their holes first, the younger ones only when it is quite dark. They protrude their bodies with great caution and very slowly, after resting a while they feel about with the anterior end of the body till they reach a neighbors's hole or come upon another worm. They now crawl along

---

[1] Edited by E. A. Andrews, Baltimore, Md., to whom abstracts, reviews and preliminary notes may be sent.